

Date: Tuesday, 5/23/2006 8:33:42 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206 L HIGH GEAR SKIDTUBE
 Job Number : 27201A
 Estimate Number : 10539
 P.O. Number : NIA Part Number : D206642341
 This Issue : 5/23/2006 S.O. No. : NIA Drawing Number : D2650 REV E
 Prsht Rev. : NC Project Number : N/A
 First Issue : NIA Type : LANDING GEAR Drawing Revision : E
 Previous Run : 26055A Material : NIA
 Written By : SEE COMMENT BELOW Due Date : 6/18/2006 Qty: 1 Um: Each
 Checked & Approved By : JOE 05.23
 Comment : Est Rev: 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-341 CHG002

KS 06-06-06

2.0 D2620 Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2620 Bent Tube 3" OD B26863 BE 06-06-27

3.0 D2647 Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2647 Fwd Cap B24842 BE 06-06-27

4.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube BE 06-06-27

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650 BE 06-06-27

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod M100660 / M18839 BE 06-06-27

4-Grind weld flush to cap on top surface only BE 06-06-28

W/O:		WORK ORDER CHANGES					
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
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Seq. #:

Machine Or Operation:

Description :

5-Cut aft end to length as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A,& B). Open to Ø0.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

BT 06-06-29

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BT 06-07-04

6.0

D26545

206 I Beam (Web)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2654-5

Web

B21093

BT 06-07-04

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting

Start Date: 06-07-04 Time: 1:00 pm

Finish Date: 06-07-05 Time: 7:00 am

A/R Sikaflex-291 M106193

Sikaflex expiry date: 06-11-01

BT 06-07-04

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Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP 6-7-6

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 17.0000 Each(s)/Unit Total : 17.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

17 D2649

Crossbolt spacer

B25864 BF 06-07-06

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod

M 18839 BF 06-07-06

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Debur

DP 6-7-11

11.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2680-041

Nut Plate

B24203

DP 6-7-11

12.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 CCR264SS3-3

Rivets

M17997

DP 6-7-11

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Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 M7885/3-4-3

Rivets

119029 DP 6-7-11

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

DP 6-7-11

15.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

2007-12-12
PD 06-07-14

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White (Ref. 4.3.5.1) as per QSI 005 4.3

Make sure Nut Plate Thread protected use paint screw

SC 06/07/17
DV

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

a.m 06-07-18

18.0

D26483

Wearpad



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 D2648-3

Wearpad

B 25904

19.0

D265611

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-11

Wearshoe

B 16357

a.m 06-07-18

W/O:		WORK ORDER CHANGES					
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Job Number: 27201A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

D265623

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-23

Wearshoe B24846

21.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-35

Wearshoe B27258

22.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3429-1

Wearpad B24417

23.0

ALS41032130

Insert



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 ALS4-1032-130

Inserts m 19 393

or (see QSI 017)

24.0

AN960JD10L

Washer



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 AN960JD10L

Washer m 101241

a.m 26.02-13

Q

W/O:		WORK ORDER CHANGES					
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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27201A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

MS27039108

Screw



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 MS27039-1-08

Screw M19551

26.0

D26511

Plug



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

14 D2651-1

Plugs B 25865

27.0

D26513

O-Ring



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

14 D2651-3

O-Rings B 25979

28.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960JD416

Washer M11151

29.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 MS27039-4-06

Screw M 6874

a.m 06-07-18 (7)

W/O:		WORK ORDER CHANGES					
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Job Number: 27201A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

30.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap B25381

31.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN960JD10L

Washer m101291

32.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-08

Screw m19551

9-m

06-07-18

(1)

33.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291 m101193

Sikaflex expiry date: 06-11-06

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291 m101193

Sikaflex expiry date: 06-11-06

9-m 06-07-18

(1)

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch: m101267

FC 06 07 19

(1)

W/O:		WORK ORDER CHANGES					
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			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/07/04

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

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Process Sheet

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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27201A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

DL 06/07/20 (1)

35.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: /

N/A

36.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

DD 06/07/24 (1)

Job Completion



U 060721

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART

DESIGN <i>1/1</i>	DRAWN BY <i>1/1</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>1/1</i>	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES	SCALE NTS
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

RELEASED

16 04 17 *1/1*

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

NOTES

- 1) WELD PER DART QSI 004
- 2) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 3) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 4) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 5) FINISH:
-CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 6) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 7) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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NO. 27201A

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ORIENTATION OF
D2680-041

